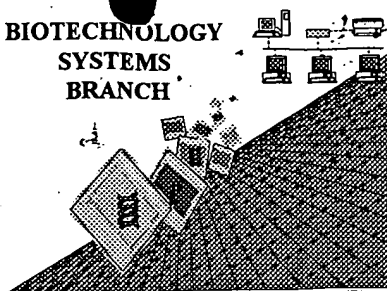


RAW SEQUENCE LISTING **ERROR REPORT**

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/910,358
Source: OIR
Date Processed by STIC: 8/1/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/910,358

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length
Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
 (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220>
Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

OIPE

RAW SEQUENCE LISTING

DATE: 08/01/2001

PATENT APPLICATION: US/09/910,358

TIME: 11:05:11

Input Set : A:\PTO_VSK.txt

Output Set: N:\CRF3\08012001\I910358.raw

m. 1-5
Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: Shi, Wenyan
4 Anderson, Maxwell
5 Morrison, Sherie
6 Trinh, Kham
7 Wims, Letitia
8 Chen, Li
10 <120> TITLE OF INVENTION: Fusion Proteins for Targeted Delivery of Antimicrobial Peptides
12 <130> FILE REFERENCE: 22851-033
14 <140> CURRENT APPLICATION NUMBER: US/09/910,358
14 <141> CURRENT FILING DATE: 2001-07-19
14 <150> PRIOR APPLICATION NUMBER: US 09/378,577
15 <151> PRIOR FILING DATE: 1999-08-20
17 <160> NUMBER OF SEQ ID NOS: 15
19 <170> SOFTWARE: PatentIn version 3.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 563
23 <212> TYPE: DNA
24 <213> ORGANISM: Synthetic-Murine *invalid - see item 10 on Eva Summary sheet*
26 <220> FEATURE:
27 <221> NAME/KEY: CDS
28 <222> LOCATION: (69)..(140)
29 <223> OTHER INFORMATION: Histatin 5
32 <220> FEATURE:
33 <221> NAME/KEY: CDS
34 <222> LOCATION: (141)..(188)
35 <223> OTHER INFORMATION: Linker Peptide
38 <220> FEATURE:
39 <221> NAME/KEY: CDS
40 <222> LOCATION: (189)..(563)
41 <223> OTHER INFORMATION: VH of SWLA3
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47 tccagtgt gat agc cac gct aag cgg cac cac gga tat aag cgg aag ttc 110
48 Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe
49 1 5 10
51 cac gag aag cac cac tcg cac aga gga tac tct ggt ggc ggt ggc tcg 158
52 His Glu Lys His His Ser His Arg Gly Tyr Ser Gly Gly Gly Gly Ser
53 15 20 25 30
55 ggc gga ggt ggg tcg ggt ggc ggc gga tcc gac gtg aag ctt gtg gag 206
56 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Lys Leu Val Glu
57 35 40 45
59 tct ggg gga ggc tta gtg aac cct gga ggg tcc ctg aaa ctc tcc tgt 254
60 Ser Gly Gly Gly Leu Val Asn Pro Gly Ser Leu Lys Leu Ser Cys
61 50 55 60
63 gca gcc tct gga ttc act ttc agt agc tat acc atg tct tgg gtt cgc 302
64 Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met Ser Trp Val Arg
65 65 70 75

RAW SEQUENCE LISTING

DATE: 08/01/2001

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Output Set: N:\CRF3\08012001\I910358.raw

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67 cag act ccg gag aag agg ctg gag tgg gtc gca tcc att agt agt ggt      350
68 Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Ser Ile Ser Ser Gly
69      80                      85                      90
71 ggt act tac acc tac tat cca gac agt gtg aag ggc cga ttc acc atc      398
72 Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly Arg Phe Thr Ile
73 95                      100                      105                      110
75 tcc aga gac aat gcc aag aac acc ctg tac ctg caa atg acc agt ctg      446
76 Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Thr Ser Leu
77                      115                      120                      125
79 aag tct gag gac aca gcc atg tat tac tgt tca aga gat gac ggc tcc      494
80 Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg Asp Asp Gly Ser
81                      130                      135                      140
83 tac ggc tcc tat tac tat gct atg gac tac tgg ggt caa gga acc tca      542
84 Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
85                      145                      150                      155
87 gtc acc gtc tct tca gct agc      563
88 Val Thr Val Ser Ser Ala Ser
89      160                      165
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93 <211> LENGTH: 24
94 <212> TYPE: PRT
95 <213> ORGANISM: Synthetic-Murine
97 <400> SEQUENCE: 2
99 Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu
100 1      5      10      15
103 Lys His His Ser His Arg Gly Tyr
104      20
107 <210> SEQ ID NO: 3
108 <211> LENGTH: 16
109 <212> TYPE: PRT
110 <213> ORGANISM: Synthetic-Murine
112 <400> SEQUENCE: 3
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115 1      5      10      15
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119 <211> LENGTH: 125
120 <212> TYPE: PRT
121 <213> ORGANISM: Synthetic-Murine
123 <400> SEQUENCE: 4
125 Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Asn Pro Gly Gly
126 1      5      10      15
129 Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
130      20      25      30
133 Thr Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
134      35      40      45
137 Ala Ser Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val
138      50      55      60
141 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
142 65      70      75      80

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/910,358

DATE: 08/01/2001

TIME: 11:05:11

Input Set : A:\PTO_VSK.txt

Output Set: N:\CRF3\08012001\I910358.raw

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145 Leu Gln Met Thr Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys
146                      85                      90                      95
149 Ser Arg Asp Asp Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr
150                      100                      105                      110
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154                      115                      120                      125
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158 <211> LENGTH: 533
159 <212> TYPE: DNA
160 <213> ORGANISM: Synthetic-Murine
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163 <221> NAME/KEY: CDS
164 <222> LOCATION: (69)..(110)
165 <223> OTHER INFORMATION: Dhvar 1
168 <220> FEATURE:
169 <221> NAME/KEY: CDS
170 <222> LOCATION: (111)..(158)
171 <223> OTHER INFORMATION: Linker Peptide
174 <220> FEATURE:
175 <221> NAME/KEY: CDS
176 <222> LOCATION: (159)..(533)
177 <223> OTHER INFORMATION: VH of SWLA3
180 <400> SEQUENCE: 5
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183 tccagtgt aag cgg ctg ttt aag gag ctc aag ttc agc ctg cgc aag tac      110
184      Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr
185      1          5          10
187 tct ggt ggc ggt ggc tgc ggc gga ggt ggg tgc ggt ggc ggc gga tcc      158
188 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
189 15          20          25          30
191 gac gtg aag ctt gtg gag tct ggg gga ggc tta gtg aac cct gga ggg      206
192 Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Asn Pro Gly Gly
193          35          40          45
195 tcc ctg aaa ctc tcc tgt gca gcc tct gga ttc act ttc agt agc tat      254
196 Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
197          50          55          60
199 acc atg tct tgg gtt cgc cag act ccg gag aag agg ctg gag tgg gtc      302
200 Thr Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
201          65          70          75
203 gca tcc att agt agt ggt ggt act tac acc tac tat cca gac agt gtg      350
204 Ala Ser Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val
205          80          85          90
207 aag ggc cga ttc acc atc tcc aga gac aat gcc aag aac acc ctg tac      398
208 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
209 95          100          105          110
211 ctg caa atg acc agt ctg aag tct gag gac aca gcc atg tat tac tgt      446
212 Leu Gln Met Thr Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys
213          115          120          125
215 tca aga gat gac ggc tcc tac ggc tcc tat tac tat gct atg gac tac      494

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RAW SEQUENCE LISTING

DATE: 08/01/2001

PATENT APPLICATION: US/09/910,358

TIME: 11:05:11

Input Set : A:\PTO_VSK.txt

Output Set: N:\CRF3\08012001\I910358.raw

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216 Ser Arg Asp Asp Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr
217          130          135          140
219 tgg ggt caa gga acc tca gtc acc gtc tct tca gct agc          533
220 Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser
221          145          150          155
224 <210> SEQ ID NO: 6
225 <211> LENGTH: 14
226 <212> TYPE: PRT
227 <213> ORGANISM: Synthetic-Murine
229 <400> SEQUENCE: 6
231 Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr
232 1          5          10
235 <210> SEQ ID NO: 7
236 <211> LENGTH: 16
237 <212> TYPE: PRT
238 <213> ORGANISM: Synthetic-Murine
240 <400> SEQUENCE: 7
242 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
243 1          5          10          15
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247 <211> LENGTH: 125
248 <212> TYPE: PRT
249 <213> ORGANISM: Synthetic-Murine
251 <400> SEQUENCE: 8
253 Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Asn Pro Gly Gly
254 1          5          10          15
257 Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
258          20          25          30
261 Thr Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
262          35          40          45
265 Ala Ser Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val
266          50          55          60
269 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
270 65          70          75          80
273 Leu Gln Met Thr Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys
274          85          90          95
277 Ser Arg Asp Asp Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr
278          100          105          110
281 Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser
282          115          120          125
285 <210> SEQ ID NO: 9
286 <211> LENGTH: 89
287 <212> TYPE: DNA
288 <213> ORGANISM: Synthetic
290 <400> SEQUENCE: 9
291 caccactcgc acagaggata ctctggtggc ggtggctcgg gcggagggtgg gtcgggtggc          60
293 ggcggtatccg acgtgaagct tgtggagtc          89
296 <210> SEQ ID NO: 10
297 <211> LENGTH: 84

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RAW SEQUENCE LISTING

DATE: 08/01/2001

PATENT APPLICATION: US/09/910,358

TIME: 11:05:11

Input Set : A:\PTO_VSK.txt

Output Set: N:\CRF3\08012001\I910358.raw

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298 <212> TYPE: DNA
299 <213> ORGANISM: Synthetic
301 <400> SEQUENCE: 10
302 ggtgtccagt gtgatatcca cgctaagcgg caccacggat ataagcggaa gttccacgag      60
304 aagcaccact cgcacagagg atac                                         84
307 <210> SEQ ID NO: 11
308 <211> LENGTH: 74
309 <212> TYPE: DNA
310 <213> ORGANISM: Synthetic
312 <400> SEQUENCE: 11
313 gatatccacc atggacttcg ggttgagctt ggttttcctt gtccttactt taaaagggtgt      60
315 ccagtgtgat agcc                                                    74
318 <210> SEQ ID NO: 12
319 <211> LENGTH: 87
320 <212> TYPE: DNA
321 <213> ORGANISM: Synthetic
323 <400> SEQUENCE: 12
324 gttcagcctg cgcaagtact ctggtggcgg tggctcgggc ggaggtgggt cgggtggcgg      60
326 cggatccgac gtgaagcttg tggagtc                                     87
329 <210> SEQ ID NO: 13
330 <211> LENGTH: 69
331 <212> TYPE: DNA
332 <213> ORGANISM: Synthetic
334 <400> SEQUENCE: 13
335 gtccttactt taaaagggtgt ccagtgtaag cggctgttta aggagctcaa gttcagcctg      60
337 cgcaagtac                                                         69
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341 <211> LENGTH: 65
342 <212> TYPE: DNA
343 <213> ORGANISM: Synthetic
345 <400> SEQUENCE: 14
346 ggatatccac catggacttc gggttgagct tggttttcct tgtccttact taaaagggtg      60
348 tccag                                                            65
351 <210> SEQ ID NO: 15
352 <211> LENGTH: 39
353 <212> TYPE: DNA
354 <213> ORGANISM: Synthetic
356 <400> SEQUENCE: 15
357 tgggtcgacw gatggggstg ttgtgctagc tgaggagac                        39

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/910,358

DATE: 08/01/2001

TIME: 11:05:12

Input Set : A:\PTO_VSK.txt

Output Set: N:\CRF3\08012001\I910358.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date